P0105: Identification By the DArTseq Method of the Genetic Origin of the *Coffea canephora* Cultivated in Vietnam and Mexico

POSTER

The coffee species *Coffea canephora* represents approximately 40% of coffee production worldwide. While the genetic diversity of wild *C. canephora* has been well studied in the past, only few studies have addressed the genetic diversity of currently cultivated varieties around the globe. Vietnam is the largest Robusta producer in the world, while Mexico is the only Latin American country, besides Brazil, that has a significant Robusta production. Knowledge of the genetic origin of Robusta cultivated varieties in countries as important as Vietnam and Mexico is therefore of high interest.

Through the use of the DArTseq method on a collection of *C. canephora* composed of known accessions and accessions cultivated in Vietnam and Mexico, 4,021 polymorphic SNPs were identified. We used a multivariate analysis using SNP data from reference accessions in order to confirm and further fine-tune the genetic diversity of *C. canephora*. Also, by interpolating the data obtained for the varieties from Vietnam and Mexico, we determined that they are closely related to each other, and identified their genetic origin. The genetic characterization based on SNP markers of the varieties grown throughout the world, increased our knowledge on the genetic diversity of *C. canephora*, and contributed to the understanding of the genetic background of varieties from very important coffee producers.

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